

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

# **Patologia Generale**

2324-2-I0202D126-I0202D041M

#### **Aims**

The course aims to introduce the student to the knowledge of the causes of human diseases, understading pathogenetic and pathophysiological mechanisms.

#### **Contents**

Homeostasis and disease. Etiology and pathogenesis: disease-causing agents. Acquired and innate immunity. The immune response. Cell and tissue damage. Inflammation and tissue repair. Oncology.

#### **Detailed program**

General Pathology. Etiology. Pathogenesis. Concept of homeostasis and disease. Onset and course of disease. Acute and chronic diseases. General etiology. Physiological and pathological predisposing factors.

Causes of disease. Physical causes, chemical causes, biological causes: bacteria, viruses, protozoa, fungi, metazoans. Virulence. Pathogenicity. Transmission of infections. Spread of infectious agents. Pathogenic action.

General properties of the immune system. Innate immunity and adaptive immunity. The cells of the immune system. The soluble mediators. Antigens. The immune response

Acute and Chronic Inflammation. Phases of the inflammatory process. Chemical mediators. The cells of inflammation.

Pathophysiology of thermoregulation. Generalities. Thermogenesis: basal metabolism, regulation of

thermogenesis. Termodispersion. Alterations in body temperature. Not fever Hyperthermia. Fever Hyperthermia: pathogenesis, course, types of fever.

Cellular homeostasis disorders. Atrophy, hypertrophy, metaplasia, dysplasia, cellular anaplasia. Cell injury and death. Oncology.

# **Prerequisites**

None

## **Teaching form**

Lectures.

# Textbook and teaching resource

All materials shown during lectures will be published in e-learning.

#### Semester

Second year, II semester

#### **Assessment method**

Written exam aimed at verifying the acquisition of notions indicated in the program: 7 multiple choice questions and an open ended question. The correctness and consistency of the answers with respect to the question requested will be assessed.

Optional final oral interview (at the request of the teacher or student) to discuss the written test.

#### Office hours

By appointment (email request)

## **Sustainable Development Goals**